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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/372,331	08/11/1999	NIKOLAI NEFEDOV	297-008769-U	1278

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EXAMINER

CHANG, EDITH M

ART UNIT	PAPER NUMBER
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2637

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/372,331

Applicant(s)

NEFEDOV, NIKOLAI

Examiner

Edith M Chang

Art Unit

2637

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 August 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1,3-10 and 12-14.

Claim(s) withdrawn from consideration: _____

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

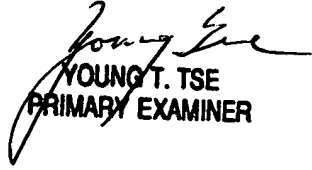
Kobayashi et al. teaches/presents concatenated system with two or three encoders and corresponding decoders in FIG. 11, FIG. 12, and FIG. 13. In FIG. 11-13, the E1, E2, and E3 as different encoders each has corresponding decoders D1, D2, and D3.

In FIG. 12A and column 12 lines 30-40, Kobayashi et al. discloses an outer encoder E1 (is a block encoder); a TCM (Trellis coded modulation E1) with the convolutional encoder E2 (the inner encoder) in conjunction the modulation E3 wherein the TCM as the FSM2 with 204 (as the E2) and 205 (as the E3) shown in the Figure 2 and page 6 lines 33-35 of the specification of the current application. Further in column 12 lines 47-60, Kobayashi et al. teaches/suggests the turbo code adopted in the transmitter side for encoder. It is well known that the turbo code is the recursive convolutional code, specially in the TCM terminated with a modulator, hence the convolution code E2 used in TCM adopted by the turbo code as the new type code that Kobayashi et al. teaches to use in the encoder, is the recursive convolutional code. In column 12 lines 52-56 of Kobayashi et al., the "Near Optimum Error Correcting Coding and Decoding: Turbo Codes" teaches the well known (Fig. 4 and Introduction).

Since Kobayashi teaches/suggests in column 12 lines 50-60 the convolutional code E2 being the turbo code, and the turbo code being a recursive convolutional code. Hence Kobayashi et al. discloses a recursive inner encoder.

In FIG. 12A and column 12 lines 35-40, the E3 is a phase modulator with constraint, further stated in column 3 lines 5-20 that the phase modulator with constraint is the memoryless modulator for example of QDPSK in light of the example/definition on page 7 lines 5-6 of the specification of the current application. Therefore, Kobayashi et al. discloses the memoryless modulator E3.

Kobayashi et al. discloses the memoryless modulator and recursive inner encoder recited in independent claims 1, 7, and 10.


YOUNG T. TSE
PRIMARY EXAMINER